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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/718,755	11/22/2000	Mark H. Englert	USG 3325	3446
7590	03/03/2004		EXAMINER RAJGURU, UMAKANT K	
Donald E Egan Attorney at Law 273 Stonegate Road Clarendon Hills, IL 60514			ART UNIT 1711	PAPER NUMBER

DATE MAILED: 03/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/718,755	ENGLERT, MARK H.	
	Examiner	Art Unit	
	Umakant K. Rajguru	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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1. An amendment (and response) has been filed on December 04, 2003.
2. Claims under examination are still 1-10.
3. Finality of earlier Office action mailed on September 30, 2003 is hereby withdrawn.
4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is still indefinite because it fails to specify the remaining 84.5% of the binder (see item 4 of prior Office action of September 30, 2003). Additional indefiniteness has how arisen since the total of the amounts of mineral aggregate, and cellulosic fiber happens to be 100% by wt (even when no mineral wool is included because it is an optional ingredient). Thus there is no room to include binder.

6. Claims 1-7 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Chen et al (US 5, 928,588) in view of Canorro et al (US 6,586,520) and Baig (US 5,911,818).

(Baig has been cited in earlier Office actions.)

Chen discloses manufacture of porous structures. A tile can be viewed as a form of such a structure, which comprises three components (column 4, line 60 to column 5, line 6). Perlite is one of the components (column 5, line 11).

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MR Cellulose fibers and metallic ^{fibers} ~~fibers~~ are another components (column 6, lines 59-66). Cationic charged resin is also included (column 6, lines 61). Components other than perlite can be used from about 0.1 to 90% by wt (column 7, lines 4-6).

Chen does not mention epichlorohydrin as binder-polymer and starch.

Canorro discloses aqueous composition comprising (A) a polyamidoamine epihalohydrin resin and (B) a material selected from flexibilizing material cross-link inhibitors and their combinations (abstract). Examples of component (A) are listed in column 11, line 56 to column 12, line 5.

It would have been obvious to use the epihalohydrin resin of Canorro as a preferred binder for the structure of Chen because of its cross-linking ability resulting in enhanced mechanical strength of the structure.

Baig discloses an acoustical tile composition in which starch is used as a binder in combination with cellulose fiber and latex (column 6, lines 13-30).

Therefore it would have been obvious to add starch as a component in the structure of Chen to improve mechanical properties.

7. Claims 8-10 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Chen et al (US 5, 928, 588) in view of Canorro et al (US 6,586,520) and Baig (US 5,911,818) as applied to claim 1 above, and further in view of Symons (US 535,571)).

(Symons has been cited in earlier Office actions).

Disclosures Chen, Canorro and Baig are presented earlier. Together they fail to mention the retention aid (of instant claims 8-10).

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Symons discloses a building board made out of a composition comprising sodium carboxymethyl cellulose (column 2, lines 33-34).

Hence it would have been obvious to use in the structure of Chen, the sodium carboxymethyl cellulose (of Symons) with the expectation of minimizing loss of binder due to the ability of the cellulose to thicken the composition.

8. Applicant's arguments filed December 04, 2003 have been fully considered but they are not persuasive.

It should be noted that instant claims encompass a composition. It can be used to make acoustical tiles in water felting process. Also there may be many other uses of the same composition. Applicant's emphasis in the response (of December 04, 2003) on page 5, on the water felting process and equipment is not persuasive.

NR Applicant's argument (on page 6) that "~~Ch~~Chen teaches a way from the water felting process etc etc" is also not convincing for above reasons, Chen does not have to teach acoustical tiles.

For similar reasons Conorro does not have teach acoustical tiles.

It is true that Symons does not use sodium carboxy nethyl cellulose with epichlorohydrin resin. However since Symons uses it with thermosetting resin, it is reasonable to infer that the carboxyl methyl cellulose of Symons should work equally well with epichlorohydrin resin of Conorro.


NR 9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to U. K. Rajguru, whose telephone number is (571) 272-1077. The examiner can normally be reached on Monday-Friday from 9:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.


U. K. Rajguru/af
February 27, 2004


James J. Seidleck
Supervisory Patent Examiner
Technology Center 1711